

**REMARKS**

Claims 1-14 are pending in the application after entry of this amendment. Claims 1-13 have been amended to remove unnecessary numerical references and to correct grammatical errors. Claim 11 has been amended to clarify that a chemical reaction is “carried” out in the chambers or chamber sections. Support for this amendment can be found in the specification of the application. Claim 14 has been withdrawn.

**I. REJECTION OF CLAIM 11 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH**

The Office Action has rejected claim 11 under 35 U.S.C. § 112, second paragraph, as allegedly failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Office Action alleged that the phrase “carded out” renders the claim indefinite. Claim 11 has been amended to correct an obvious typographical error and thereby clarify the phrase “carried out,” as used in the specification. Thus, this rejection should be withdrawn.

**II. REJECTION OF CLAIMS 1-13 UNDER 35 U.S.C. § 102(b)/§ 103(a)**

The Office Action has rejected claims 1-13 under 35 U.S.C. § 102(b) as allegedly being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over Mazzotti (Journal of Chromatography, 769 (1997), pp 3-24; hereinafter “Mazzotti”). Applicants respectfully disagree with this rejection for the following reasons.

As an initial matter, Mazzotti does not disclose the variable feed concentration and/or composition process of the present invention. Mazzotti discloses a conventional Simulated Moving Bed (“SMB”) process having a constant feed concentration. Section 4 of Mazzotti describes, *inter alia*, the performance achieved in a conventional SMB process with individual experimental runs, wherein each experimental run was conducted at a separate feed concentration. Mazzotti calculates the performance of such a conventional SMB process unit using a constant feed for individual process runs. In contrast, claim 1 of the present application

provides that the concentration of the input multiple-component fluid mixture and/or a composition of the solvent is/are changed within the cycle unit. Thus, Mazzotti fails to disclose the variable feed concentration and/or composition process of the present invention, wherein the concentration and/or composition can be varied during an individual process run and even within each cycle unit.

Moreover, Mazzotti would not have rendered obvious the variable feed concentration and/or composition process of the present invention. Mazzotti is directed to a constant feed concentration process and describes the performance achievable for individual process runs performed at constant feed concentrations. There is no suggestion or motivation for one of skill in the art to modify the constant feed concentration process of Mazzotti by, for example, varying the feed concentration and/or composition during a given process run. As Mazzotti neither discloses nor suggests the process of the present invention, Mazzotti does not anticipate or render the present invention obvious. Thus, this rejection should be withdrawn.

### **III. REJECTION OF CLAIMS UNDER 35 U.S.C. § 103(a)**

The Office Action has rejected, in various combinations, claims 2, 3, 7-10, and 13 as allegedly being obvious over Mazzotti, further in view of U.S. Patent 5,422,007 to Nicoud (hereinafter "Nicoud"), WO 00/33934 to Jensen (hereinafter "Jensen"), U.S. Patent 5,618,972 to Funk (hereinafter "Funk"), and/or U.S. Patent 5,102,533 to Kearney (hereinafter "Kearney"). Applicants respectfully disagree with these rejections for the following reasons.

As an initial matter and for the reasons described above, claim 1 is both novel and non-obvious. Thus, claims 2-13, all of which depend from claim 1, are also novel and non-obvious. As described above, Mazzotti does not disclose or suggest the variable feed concentration and/or composition process of the present invention. Mazzotti is directed to a constant feed concentration process and describes the performance achievable for individual process runs performed at constant feed concentrations. The Office Action asserts that the present invention is merely an optimization of the steps of Mazzotti to enhance separation, but Mazzotti fails to disclose or even suggest the same steps of the present invention, namely that the feed

concentration and/or process can be varied during the process or within each cycle unit. Thus, the present invention is not merely an optimization of the steps disclosed in Mazzotti. Moreover, even if the steps of Mazzotti were optimized, it would not provide the advantages, such as, for example, higher productivity and/or reduction in solvent consumption (*see* page 6, line 31, page 15, line 4 of the English language specification) of the present invention.

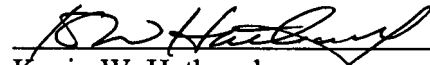
Similarly, the combination of Mazzotti with Nicoud, Jensen, Funk, and/or Kearney would not result in the process of the present invention. Neither Mazzotti, Nicoud, Jensen, Funk, and/or Kearney, alone or in combination, teach or suggest the variable feed concentration and/or composition process of the present invention. Further, there is nothing in any of these documents, alone or in combination, that would motivate one of skill in the art to modify the process of Mazzotti by, for example, varying the feed concentration and/or composition during the process or within each cycle unit. Thus, the combination of Mazzotti with Nicoud, Jensen, Funk, and/or Kearney would not render the present invention obvious and these rejections should be withdrawn.

A Credit Card Payment Form PTO-2038 is enclosed authorizing payment in the amount of \$ 120.00, representing the fee for a one-month extension of time. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

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Respectfully submitted,

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Kevin W. Hathcock

Sept. 4, 2007  
Date